-	Application No.	Applicant(s)
Notice of Allowability		
	10/749,448 Examiner	KIM ET AL.
	Examiner	Art Unit
	Hai L. Nguyen	2816
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>the amendment filed on 6/13/2005</u> .		
2. The allowed claim(s) is/are <u>1-3,5-13 and 15-20</u> .		
3. The drawings filed on 13 June 2005 are accepted by the Examiner.		
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some c) None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> </ul>		
2. Certified copies of the priority documents have been received in Application No.		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) 🗌 hereto or 2) 📋 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s)  1. Notice of References Cited (PTO-892)	5  Notice of Informal I	Patent Application (PTO-152)
2. Notice of Praftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	`` '
2. Motice of Drafferson's Faterit Drawing Neview (F10-540)		
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4/07/2005</li> </ol>	Paper No./Mail Da 8), 7. ☐ Examiner's Amend	ment/Comment
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Statem	ent of Reasons for Allowance
of Biological Material	9.	

## **DETAILED ACTION**

## Response to Amendment

1. The amendment received on 6/13/2005 has been reviewed and considered with the following results:

As to the objection to the drawings, Applicant's revision of the drawings has overcome the objection, as such; the objection has been withdrawn.

As to the objections to claims 1, 4, 11, and 14; Applicant's amendments have overcome the objections, as such; the objections have been withdrawn.

As to the prior art rejections to the claims, Applicant's amendments with respect to the previous prior art rejections mailed on 02/24/2005 have overcome the rejections, as such; the prior art rejections have been withdrawn. Therefore the case is found to be in allowance condition for the reasons as set for below.

## REASON FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to disclose or fairly suggest an analog DLL circuit (as shown in Fig. 5) having a very specific limitation as the tracking analog-digital converter (100 in instant Fig. 6) includes a voltage comparator (110) for comparing the reference voltage (VC) with the tracking voltage (VT); a counting means (120) for counting in response to an outputted signal (UP1, DOWN1) from the voltage comparator, and for outputting a counting signal; a register (130) for storing a digital value which corresponds to the counting signal; and a digital-analog converting means (140, 160) for generating a voltage which corresponds to the digital value, and

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for outputting the voltage as the tracking voltage (VT); and being configured in combination with the rest of the limitations of the base claims and any intervening claims.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN 4/2/1

TIMOTHY P. CALLAHAN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800